



Elektronische Bauelemente

# 1A1 THRU 1A7

VOLTAGE 50V ~ 1000V  
1.0 AMP Silicon Rectifiers

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free



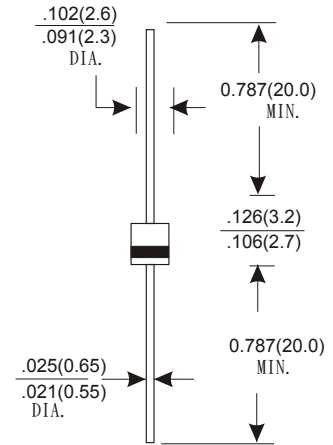
R-1

## FEATURES

- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

## MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Axial Lead, Solder Able per MIL-STD-202, Method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any
- Weight: 0.19 grams



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	1A1	1A2	1A3	1A4	1A5	1A6	1A7	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current, .375" (9.5mm) Lead Length at Ta=75 °C	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	25							A
Maximum Instantaneous Forward Voltage at 1.0A	1.0							V
Maximum DC Reverse Current Ta = 25 °C	5.0							µA
at Rated DC Blocking Voltage Ta = 100 °C	50							µA
Typical Junction Capacitance (Note 1)	15							pF
Typical Thermal Resistance RθJA (Note 2)	60							°C / W
Operating and Storage Temperature Range T <sub>J</sub> , T <sub>STG</sub>	-65 ~ +175							°C

### NOTES:

1. Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient .375" (9.5mm) Lead Length.

### ● RATING AND CHARACTERISTIC CURVES ( 1A1 THRU 1A7 )

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

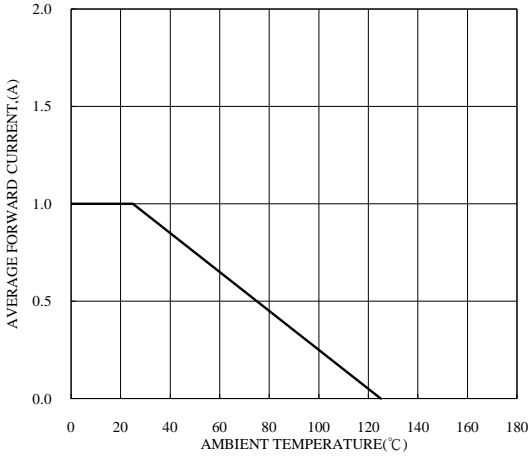


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

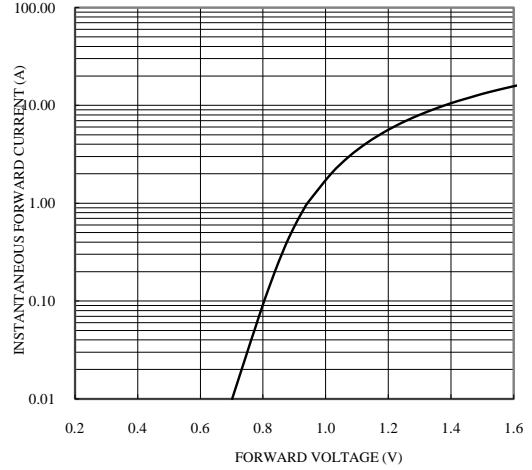


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

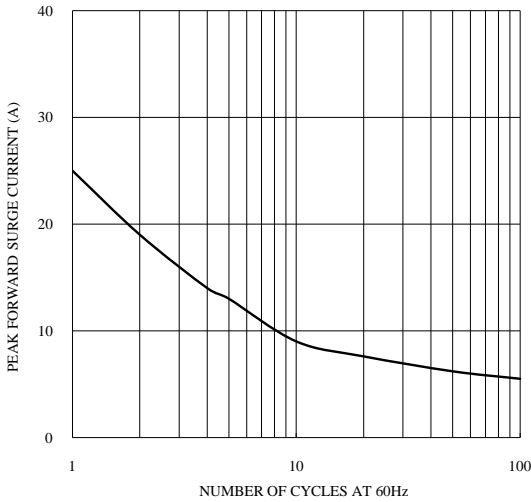


FIG. 5-TYPICAL REVERSE CHARACTERISTICS

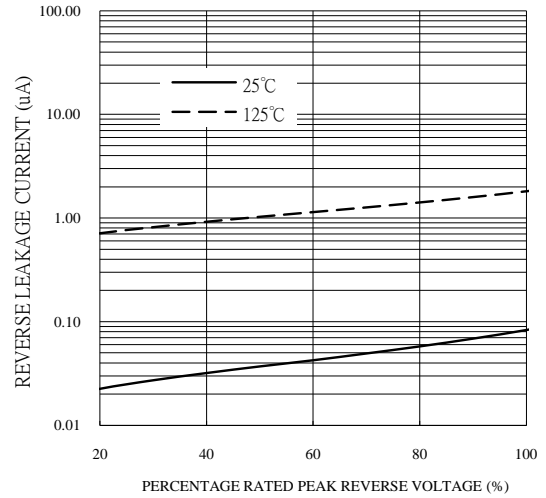


FIG. 4-TYPICAL JUNCTION CAPACITANCE

